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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,250	01/23/2004	Minoru Hayashi	247933US3	4501
22850	7590	04/27/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			SIMONE, CATHERINE A	
			ART UNIT	PAPER NUMBER

1772

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/762,250

Applicant(s)

HAYASHI ET AL.

Examiner

Catherine Simone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,8 and 12-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,8 and 12-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Withdrawn Rejections*

1. The 35 U.S.C. 102 rejection of claims 1-4 and 8 as anticipated by Watanabe et al. of record in the Office Action mailed 11/16/05, Pages 2-4, Paragraph #3 has been withdrawn due to the Applicants amendment filed 2/6/06.
2. The 35 U.S.C. 103 rejection of claims 1-4 and 8 over Watanabe et al. of record in the Office Action mailed 11/16/05, Pages 4-6, Paragraph #5 has been withdrawn due to the Applicants amendment filed 2/6/06.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 8, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi et al. (JP 2000-343557; refer to the computer translation copy) in view of Nomura et al. (US 6,368,701).

Regarding claims 1, 12 and 15, Takashi et al. discloses a sheet-shaped molded laminate including at least one of a concave portion and a convex portion, comprising a laminated skin member including a sheet-shaped lamination structure and a decorative face (drawing 1, element 2), and a resin base material (drawing 1, element 1) integrally injection molded on a face of the

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laminated skin member placed on an opposite side to the decorative face of the laminated skin member (drawing 1, element 2b), the laminated skin member including a sheet-shaped foamed layer (drawing 1, element 2a) with a density equal to or greater than  $0.04 \text{ g/cm}^3$  (see paragraph 0008, lines 1-3), a sheet-shaped decorative skin member (drawing 1, element 2b) bonded to one face of the foamed layer and including the decorative face, and a sheet-shaped backing layer (drawing 1, element 2c) bonded to the other face of the foamed layer. However, Takashi et al. fails to disclose an elastic modulus of the laminated skin member in a warping deformation preventive direction of the molded laminate being equal to or smaller than  $196\text{N}/25\text{mm}$  (width of a test piece of the laminated skin member  $25\text{mm}$ ) with the laminated skin member being stretched by 33%, before the laminated skin member and the resin base material are integrally molded. Takashi et al. does, however, teach the laminated skin member 2 having an elongation property (modulus) in the range of  $4\text{-}30\text{N}/50\text{mm}$  (see paragraph 0008, lines 6-7) and the layers of the laminated skin member including materials similar to those of the laminated skin member disclosed in the present application (see paragraph 0005, lines 4-7). Therefore, the optimum range for the elastic modulus of the laminated skin member in a warping deformation preventive direction of the molded laminate would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the laminated skin member in Takashi et al. to have an elastic modulus in a warping deformation preventive direction of the molded laminate equal to or smaller than  $196\text{N}/25\text{mm}$  with the laminated skin member being stretched by 33%, before the laminated skin member and the resin base material are integrally molded, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable

ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*.

Furthermore, Takashi et al. fails to disclose glass fibers disposed in the resin base material wherein the ratio of the glass fibers to the resin base material is 20% by weight. Nomura et al. teaches that it is old and well known in the art to have glass fibers disposed in the resin base material of a molded laminate and the ratio of the glass fibers to the resin base material is 20% by weight (see col. 4, lines 4-6) for the purpose of reinforcing the resin base material and provide rigidity, impact strength and sufficient resistance to local stress and torsion. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the resin base material in Takashi et al. with glass fibers disposed therein and have the ratio of the glass fibers to the resin base material be 20% by weight as suggested by Nomura et al. in order to reinforce the resin base material and provide rigidity, impact strength and sufficient resistance to local stress and torsion.

Regarding claim 2, Takashi et al. further fails to disclose the elastic modulus of the laminated skin member in the warping deformation preventive direction of the molded laminate being set lower than an elastic modulus of the laminated skin member in a crossing direction to the warping deformation preventive direction. However, the optimum range for the elastic modulus of the laminated skin member in a warping deformation preventive direction of the molded laminate would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the laminated skin member in Takashi et al. to have the elastic modulus of the laminated skin member in the warping deformation preventive direction of the molded laminate set lower than an elastic modulus of the

laminated skin member in a crossing direction to the warping deformation preventive direction, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*.

Regarding claims 3 and 8, the density of the backing layer in Takashi is inherently set equal to or greater than  $100 \text{ g/m}^2$  and is inherently between  $100 \text{ g/m}^2$  and  $160 \text{ g/m}^2$ , since the backing layer in Takashi includes a non-woven fabric (see paragraph 0008, line 5) which is similar to that of the backing layer disclosed in the present application. Regarding claim 4, the molded laminate in Takashi is used for an interior equipment (see paragraph 0006, line 3).

5. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi et al. (JP 2000-343557; refer to the computer translation copy) in view of Nomura et al. (US 6,368,701) and further in view of Takahashi et al. (US 6,237,933).

Takashi et al. and Nomura et al. teach the molded laminate as detailed above. However, Takashi et al. fails to disclose the resin base material comprising polycarbonate and acrylonitrile-ethylene propylene-terpolymer-styrene. Takahashi et al. teaches that it is old and well known in the art to have the resin base material of a molded laminate comprise polycarbonate and acrylonitrile-ethylene propylene-terpolymer-styrene (see col. 4, line 66) for the purpose of providing a hard resin base material having impact-resistance and rigidity. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the resin base material of the molded laminate in Takashi et al. to comprise polycarbonate and acrylonitrile-ethylene propylene-terpolymer-styrene as suggested by Takahashi et al. in order to provide a hard resin base material having rigidity and impact-resistance.

***Response to Arguments***

6. Applicant's arguments filed 2/6/06 have been fully considered but they are not persuasive. Applicants argue "Takashi does not discuss, to any extent, an elastic modulus in a warping deformation preventive direction. Thus, it would not be proper for the Office Action to maintain that Takashi, which does not discuss an elastic modulus in a warping deformation preventive direction, recognizes such an elastic modulus as a variable that achieves any particular result". However, it is to be pointed out that Takashi teaches an elongation property (modulus) of the laminated skin member being in the range of 4-30N/50mm (see paragraph 0008, lines 6-7). Therefore, the optimum range for the elastic modulus of the laminated skin member in a warping deformation preventive direction of the molded laminate would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the laminated skin member in Takashi to have an elastic modulus in a warping deformation preventive direction of the molded laminate equal to or smaller than 196N/25mm with the laminated skin member being stretched by 33%, before the laminated skin member and the resin base material are integrally molded, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

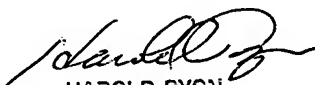


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Catherine A. Simone  
Examiner  
Art Unit 1772  
April 26, 2006



HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
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4/26/06